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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/808,536	03/14/2001	Olli Talvitie	460-010212-US(PAR)	3804

7590 03/23/2005

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EXAMINER	
MILORD, MARCEAU	
ART UNIT	**PAPER NUMBER**
2682	

DATE MAILED: 03/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/808,536	TAMPERE ET AL	
	Examiner	Art Unit	
	Marceau Milord	2682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,11-14,20 and 21* is/are rejected.

7)☒ Claim(s) *6-10 and 15-19* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-5, 11-14, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brickman et al (US Patent No 4315330) in view of Borg (US Patent No 5768689).

Regarding claim 1, Brickman et al discloses a system (figs. 3-5) for measuring a radio frequency signal in a wireless station, whereby the system comprises at least testing equipment, the testing equipment comprises at least a testing apparatus (col. 2, line 52-col. 3, line 44), a switching means (col. 7, line 40-col. 8, line 28), which has at least a first position, in which the radio frequency signal is arranged to be directed between the radio part of the wireless station and the antenna (col. 6, line 60- col. 7, line 65), and a second position, in which the radio frequency signal is arranged to be directed between the radio part of the wireless station and the testing apparatus via said switching means in

that a switching aperture is provided in the wiring board at least partly at the location of said switching means, through which aperture said switching means is arranged to be switched to the second position (col. 9, line 26- col. 10, line 61).

However, Brickman et al does not specifically disclose the features of a measuring head and means for transmitting electrical signals between said testing apparatus and measuring head and the wireless station comprises at least one radio part, a wiring board and an antenna.

On the other hand, Borg, from the same field of endeavor, discloses a test loop in a cellular network for testing and supervising a complete chain of radio equipment needed to carry cellular traffic from a radio base station. A software modified mobile station including a transceiver test unit is connected between a transmitter and receiver parts in a radio base station. Logic is introduced in the base station controller to establish connections to the mobile station on all traffic channels in the cell and evaluate measurement reports from the transceiver test unit and receiver (col. 3, lines 52-66). Furthermore, the transceiver test unit measures and reports signal strength and quality of the downlink signal in the transceiver test loop. The processor in the BSC is programmed for evaluating these measurements and reports (col. 5, line 1- col. 6, line 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Borg to the communication system of Brickman in order to provide test and supervision capabilities over a complete chain of radio equipment.

Regarding claim 2, Brickman et al as modified discloses a system (figs. 3-5) for measuring a radio frequency signal in a wireless station, characterized in that a property of the radio frequency signal, such as power, frequency, sensitivity, bit error rate or

modulation spectrum, which has an effect on the performance, is arranged to be measured (col. 11, line 37- col. 12, line 34).

Regarding claim 3, Brickman et al as modified discloses a system (figs. 3-5) for measuring a radio frequency signal in a wireless station in which the wireless station also comprises at least a shell characterized in that a testing aperture is provided in said shell at least partly at the location of the switching aperture, through which testing aperture and switching aperture said switching means is arranged to be switched to the second position (col. 6, line 60- col. 7, line 65;col. 9, line 26- col. 10, line 61).

Claims 4-5 contain similar limitations addressed in claim 1, and therefore are rejected under a similar rationale.

Regarding claim 11, Brickman et al discloses a method (figs. 3-5) for measuring a radio frequency signal in a wireless station, whereby radio frequency power is measured by means of testing equipment (col. 2, line 52- col. 3, line 44), the testing equipment comprises at least a testing apparatus, a switching means (col. 7, line 40-col. 8, line 28), which has at least an first position, in which the radio frequency signal is directed between the radio part of the wireless station and the testing apparatus via said switching means (col. 6, line 60- col. 7, line 65), a switching aperture is formed in the wiring board at least partly at the location of said switching means through which aperture said switching means is switched to the second position (col. 9, line 26- col. 10, line 61).

However, Brickman et al does not specifically disclose the features of a measuring head and means for transmitting electrical signals between said testing apparatus and measuring head and the wireless station comprises at least one radio part, a wiring board and an antenna.

On the other hand, Borg, from the same field of endeavor, discloses a test loop in a cellular network for testing and supervising a complete chain of radio equipment needed to carry cellular traffic from a radio base station. A software modified mobile station including a transceiver test unit is connected between a transmitter and receiver parts in a radio base station. Logic is introduced in the base station controller to establish connections to the mobile station on all traffic channels in the cell and evaluate measurement reports from the transceiver test unit and receiver (col. 3, lines 52-66). Furthermore, the transceiver test unit measures and reports signal strength and quality of the downlink signal in the transceiver test loop. The processor in the BSC is programmed for evaluating these measurements and reports (col. 5, line 1- col. 6, line 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Borg to the communication system of Brickman in order to provide test and supervision capabilities over a complete chain of radio equipment.

Regarding claim 12, Brickman et al as modified discloses a method (figs. 3-5) for measuring a radio frequency signal in a wireless station, characterized in that a property of the radio frequency signal, such as power, frequency, sensitivity, bit error rate or modulation spectrum, which has an effect on the performance, is measured (col. 11, line 37- col. 12, line 34).

Claims 13-14 contain similar limitations addressed in claim 11, and therefore are rejected under a similar rationale.

Regarding claims 20-21, Brickman et al discloses a system for measuring a radio frequency signal in a wireless station comprising: a radio part coupled to an antenna in the wireless station (col. 2, line 52- col. 3, line 44); a switching device mounted on one

side of a wiring board in the wireless station and an aperture formed on the other side of the wiring board allowing the switching device to be accessed to switch from a first position to a second position (col. 7, line 40-col. 8, line 28), the switching device, when in the first position being electrically connected to the antenna and when in the second position being electrically connected to the measuring head; a testing card adapted to be received in the wireless station, the testing card including a projecting part (col. 6, line 60- col. 7, line 65 ;col. 9, line 26- col. 10, line 61).

However, Brickman et al does not specifically disclose the features of a measuring head coupled to a testing apparatus, the measuring head adapted to be received in the aperture formed in the wiring board.

On the other hand, Borg, from the same field of endeavor, discloses a test loop in a cellular network for testing and supervising a complete chain of radio equipment needed to carry cellular traffic from a radio base station. A software modified mobile station including a transceiver test unit is connected between a transmitter and receiver parts in a radio base station. Logic is introduced in the base station controller to establish connections to the mobile station on all traffic channels in the cell and evaluate measurement reports from the transceiver test unit and receiver (col. 3, lines 52-66). Furthermore, the transceiver test unit measures and reports signal strength and quality of the downlink signal in the transceiver test loop. The processor in the BSC is programmed for evaluating these measurements and reports (col. 5, line 1- col. 6, line 64). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Borg to the communication system of Brickman in order to provide test and supervision capabilities over a complete chain of radio equipment.

Allowable Subject Matter

3. Claims 6-10, 15-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 703-306-3023. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian C. Chin can be reached on 703-308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MARCEAU MILORD

Marceau Milord
Examiner
Art Unit 2682

MARCEAU MILORD
PRIMARY EXAMINER

3-16-05